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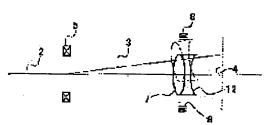
## (54) ELECTRON BEAM OPTICAL DEVICE

(57)Abstract:

PROBLEM TO BE SOLVED: To correct oblique aberration, to improve the resolution of an electron beam optical device, and to prevent a

sample from being damaged.

SOLUTION: A scanning electron microscope to which the subject device can be applied is composed to have an electrostatic magnetic field composite object lens (a deceleration field). In this case, at least one deflection system 5 is installed, a corrected deflection magnetic field and a corrected deflection electric field are overlapped in the vicinity of an object lens 7, corresponding to a deflection orbit 3 of an electron beam deflected by the deflection system 5, and the corrected deflection magnetic field and the corrected deflection electric field correct oblique aberration to realize high resolution. Moreover, the deceleration field is formed, so that a high accelerating voltage is used and furthermore a sample damage is repressed.



## **LEGAL STATUS**

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